Listing and Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (currently amended) A gas discharge lamp with

- a discharge vessel;
- electrodes projecting into the discharge vessel; ~~and~~
- a translucent, electrically conductive first screening which screens the discharge vessel ~~(2)~~ and comprises connection means for providing an at least high-frequency connection between the screening and a second screening of an electrical system used for operating the gas discharge lamp so as to form a coaxial screening system enclosing the discharge vessel with the electrodes during operation of the gas discharge lamp; and
- a conductor track, situated along a surface of the ~~gas discharge lamp~~ first screening that encloses the discharge vessel, having a lower ohmic resistance than portions of the ~~gas discharge lamp~~ first screening that is employed to enhance the conductivity of the ~~gas discharge lamp~~ first screening.

2. (currently amended) The gas discharge lamp claimed in claim 1, wherein the gas discharge lamp comprises an outer bulb surrounding the discharge vessel, and the first screening comprises a layer of conductive translucent material or a grid structure of conductive material arranged in or on a wall of the outer bulb.

3. (currently amended) The gas discharge lamp claimed in claim 1, wherein the first screening has an at least high-frequency connection to the second screening of the

electrical system used for operating the gas discharge lamp in two mutually opposed locations of the gas discharge lamp during operation thereof.

4. (currently amended) The gas discharge lamp claimed in claim 1, wherein at least one of the electrodes is electrically connected to a supply line comprising a third screening, and the first screening ~~of the gas discharge lamp~~ is connected with electrical conduction to the third screening ~~of said supply line~~.

5. (currently amended) The gas discharge lamp claimed in claim 1, wherein a supply line extend~~ings~~ inside the first screening ~~of the gas discharge lamp~~ and is connected to one of the electrodes.

6. (currently amended) The gas discharge lamp claimed in claim 1, wherein the first screening ~~of the gas discharge lamp~~ is connected with electrical conduction to a third screening of a lampholder during operation of the gas discharge lamp.

7. (currently amended) A gas discharge lamp comprising:

- a discharge vessel;
- electrodes projecting into the discharge vessel;
- a translucent, electrically conductive first screening which screens the discharge vessel and comprises connection means for providing an at least high-frequency connection between the first screening and a second screening of an electrical system used for operating the gas discharge lamp so as to form a coaxial screening

system enclosing the discharge vessel with the electrodes during operation of the gas discharge lamp,

- wherein the first screening of the gas discharge lamp serves as a power supply line and is electrically connected to one of the electrodes.

8. (currently amended) The gas discharge lamp ~~as~~ claimed in claim 7, wherein the electrode is connected to an additional supply line which is arranged in parallel to the first screening of the gas discharge lamp.

9. (currently amended) The gas discharge lamp ~~as~~ claimed in claim 8, wherein an inductive element included in the additional ~~return~~ supply line.

10. (currently amended) The gas discharge lamp claimed in claim 7, wherein the first screening ~~of the gas discharge lamp~~ is coupled to a second screening of a lampholder via a capacitive component during operation of the gas discharge lamp.

11. (currently amended) The gas discharge lamp claimed in claim 7, wherein the first screening of the gas discharge lamp is connected to ~~the~~ another electrode via a capacitive component.

12. (currently amended) A headlight or luminaire with a gas discharge lamp as claimed in claim 1 and with an electrical system for operating the gas discharge lamp, which system ~~has a~~ comprises the second screening, wherein the first screening ~~of the gas discharge lamp~~

is connected to the second screening ~~of the electrical system~~ at least as regards to high frequencies so as to form a coaxial screening system enclosing the discharge vessel and its electrodes.

13. (currently amended) A gas discharge lamp with

a discharge vessel~~,~~;

electrodes projecting into the discharge vessel~~,~~; and

a translucent, electrically conductive first screening which screens the discharge vessel and comprises connection means for providing an at least high-frequency connection between the first screening and a second screening of an electrical system used for operating the gas discharge lamp so as to form a coaxial screening system enclosing the discharge vessel with the electrodes during operation of the gas discharge lamp,

wherein at least one of the electrodes is electrically connected to a supply line comprising a third screening within a coaxial cable, and the first screening ~~of the gas discharge lamp~~ is connected with electrical conduction to the third screening ~~of said supply line~~.

14. (currently amended) A gas discharge lamp comprising:

a discharge vessel~~,~~;

electrodes projecting into the discharge vessel~~,~~; and

a translucent, electrically conductive first screening which screens the discharge vessel and comprises connection means for providing an at least high-frequency connection between the first screening and a second screening of an electrical system used

for operating the gas discharge lamp so as to form a coaxial screening system enclosing the discharge vessel with the electrodes during operation of the gas discharge lamp~~;~~,

wherein the first screening of the gas discharge lamp serves as a supply line and is electrically connected to one of the electrodes,

wherein the at least one of the electrodes is connected to a main supply line, wherein the main supply line is electrically connected to an additional supply line that is branched from the main supply line and is arranged in parallel to and along a length of the first screening ~~of the gas discharge lamp;~~ and

wherein an inductive element is included in the additional ~~return~~ supply line.

15. (currently amended) A gas discharge lamp comprising:

a discharge vessel,

electrodes projecting into the discharge vessel,

a translucent, electrically conductive first screening which screens the discharge vessel and comprises connection means for providing an at least high-frequency connection between the first screening and a second screening of an electrical system used for operating the gas discharge lamp, so as to form a coaxial screening system enclosing the discharge vessel with the electrodes during operation of the gas discharge lamp;

wherein the first screening of the gas discharge lamp serves as a supply line and is electrically connected to one of the electrodes, and

wherein the first screening of the gas discharge lamp is coupled to a screening of a lampholder via a capacitive component during operation of the gas discharge lamp.

16. (currently amended) A gas discharge lamp comprising:

a discharge vessel,

electrodes projecting into the discharge vessel,

a translucent, electrically conductive first screening which screens the discharge vessel and comprises connection means for providing an at least high-frequency connection between the first screening and a second screening of an electrical system used for operating the gas discharge lamp, so as to form a coaxial screening system enclosing the discharge vessel with the electrodes during operation of the gas discharge lamp,

wherein the first screening of the gas discharge lamp serves as a supply line and is electrically connected to one of the electrodes, and

wherein the first screening of the gas discharge lamp is connected to another one of the electrodes via a capacitive component.